Abstract #10 - Embargoed until Monday, April 24th at 1:30pm ET

Hospital-Associated Outbreaks of Multidrug-Resistant *Candida auris* — Multiple Cities, Colombia, 2016

Paige A. Armstrong, P. Escandon, DH. Caceres, N. Chow, S. Rivera, MJ. Stuckey, C. Hilbert, J. Díaz, A. Gomez, N. Vélez, CM. Parra-Giraldo, I. Berrio, C. Varón, Grupo de Investigación en Enfermedades "GREINMIL", N. Villalobos, A. Ramírez, P. López, E. Berkow, L. Gade, R. Welsh, A. Litvintseva, O. Pacheco, S. Lockhart, R. Fagan, J. Díaz, A. Espinosa, T. Chiller, C. Duarte, B. Jackson

Background: The emerging multidrug-resistant fungus, *Candida auris*, has caused hospital-associated outbreaks with high mortality in several countries. Reported cases of *C. auris* infection in Colombia increased in 2016, prompting concern for further spread. We investigated to elucidate transmission mechanisms and inform infection control.

Methods: A case was defined as isolation of *Candida auris* from a patient's blood with confirmation by molecular identification, isolated from a patient's blood. We abstracted medical records and sampled patients, healthcare workers, and hospital surfaces. We performed antifungal susceptibility studies and whole genome sequencing (WGS) on isolates.

Results: We identified 40 cases at 4 hospitals in 3 cities. In-hospital mortality was 56%. Nearly half (45%) of patients were infants. All patient had a central venous catheter, two-thirds had recent surgery, and half received parenteral nutrition during their stay. The median time from admission to collection of blood culture yielding *C. auris* was 22 days. *C. auris* was isolated from 44 (14%) of 325 environmental samples, including from transport equipment and rooms without a known case-patient present for up to 6 months. Of the 6 patients sampled, *C. auris* was cultured from either the groin or axilla of 4. Samples from 2 nurses' hands yielded *C. auris*. Nine (23%) of 40 isolates were resistant to fluconazole and 7 (18%) of 40 were resistant to amphotericin B; all isolates were highly related by WGS.

Conclusions: *C. auris* caused outbreaks of invasive disease, predominantly in young children, with high mortality in several Colombian hospitals. *C. auris* was found on patient and healthcare worker skin and on hospital surfaces, suggesting that assiduous infection control practices are needed to limit the spread of this emerging pathogen.